

Exhibit 8

Vahid Tarokh

Rhodes Family Professor of Electrical and Computer Engineering

Vahid Tarokh's research is in pursuing new formulations and approaches to getting the most out of datasets. Current projects are focused on representation, modeling, inference and prediction from data such as determining how different people will respond to exposure to certain viruses, predicting rare events from small amounts of data, formulation and calculation of limits of learning from observations, and prediction of a macaque monkey's future actions from its brain waves.



APPOINTMENTS AND AFFILIATIONS

- Rhodes Family Distinguished Professor of Electrical and Computer Engineering
- Professor of Electrical and Computer Engineering
- Professor of Mathematics

CONTACT INFORMATION

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- **Websites:**

- [Vahid Tarokh's Webpage \(http://www.duke.edu/~vt45\)](http://www.duke.edu/~vt45)

RESEARCH INTERESTS

Representation, modeling, inference and prediction from data

AWARDS, HONORS, AND DISTINCTIONS

- Member. National Academy of Engineering. 2019

COURSES TAUGHT

- COMPSCI 675D: Introduction to Deep Learning
- ECE 280L9: Signals and Systems - Lab
- ECE 280L: Introduction to Signals and Systems
- ECE 392: Projects in Electrical and Computer Engineering
- ECE 493: Projects in Electrical and Computer Engineering
- ECE 494: Projects in Electrical and Computer Engineering
- ECE 590: Advanced Topics in Electrical and Computer Engineering
- ECE 590D: Advanced Topics in Electrical and Computer Engineering
- ECE 685D: Introduction to Deep Learning
- ECE 899: Special Readings in Electrical Engineering

REPRESENTATIVE PUBLICATIONS

- Kojima, S; Maruta, K; Feng, Y; Ahn, CJ; Tarokh, V, *CNN-Based Joint SNR and Doppler Shift Classification Using Spectrogram Images for Adaptive Modulation and Coding*, IEEE Transactions on Communications, vol 69 no. 8 (2021), pp. 5152-5167 [[10.1109/TCOMM.2021.3077565](https://doi.org/10.1109/TCOMM.2021.3077565)] [<http://dx.doi.org/10.1109/TCOMM.2021.3077565>] [[abs \(https://scholars.duke.edu/individual/pub1483396\)](https://scholars.duke.edu/individual/pub1483396)].
- Feng, Y; Wongkamthong, C; Soltani, M; Ng, Y; Gogineni, S; Kang, B; Pezeshki, A; Calderbank, R; Rangaswamy, M; Tarokh, V, *Knowledge-Aided Data-Driven Radar Clutter Representation*, IEEE National Radar Conference Proceedings, vol 2021-May (2021) [[10.1109/RadarConf2147009.2021.9455318](https://doi.org/10.1109/RadarConf2147009.2021.9455318)] [<http://dx.doi.org/10.1109/RadarConf2147009.2021.9455318>] [[abs \(https://scholars.duke.edu/individual/pub1494471\)](https://scholars.duke.edu/individual/pub1494471)].
- Ding, J; Diao, E; Zhou, J; Tarokh, V, *On Statistical Efficiency in Learning*, IEEE

Transactions on Information Theory, vol 67 no. 4 (2021), pp. 2488-2506
[[10.1109/TIT.2020.3047620](https://doi.org/10.1109/TIT.2020.3047620) (<http://dx.doi.org/10.1109/TIT.2020.3047620>)] [[abs \(https://scholars.duke.edu/individual/pub1470082\)](https://scholars.duke.edu/individual/pub1470082)].

- Soltani, M; Wu, S; Li, Y; Ravier, R; Ding, J; Tarokh, V, *Compressing Deep Networks Using Fisher Score of Feature Maps*, Data Compression Conference Proceedings, vol 2021-March (2021) [[10.1109/DCC50243.2021.00083](https://doi.org/10.1109/DCC50243.2021.00083) (<http://dx.doi.org/10.1109/DCC50243.2021.00083>)] [[abs \(https://scholars.duke.edu/individual/pub1483395\)](https://scholars.duke.edu/individual/pub1483395)].
- Yang, H; Jing, D; Tarokh, V; Bewley, G; Ferrari, S, *Flow parameter estimation based on on-board measurements of air vehicle traversing turbulent flows*, Aiaa Scitech 2021 Forum (2021), pp. 1-10 [[abs \(https://scholars.duke.edu/individual/pub1474034\)](https://scholars.duke.edu/individual/pub1474034)].